

ABSTRACT OF THE DISCLOSURE

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A communication device which efficiently transports packets through optimal routes. When there are two or more routes to reach a certain destination, a test packet generator generates a test packet for each route, one of them being designated as the reference test packet. A transmission time acquisition unit records the transmission time of each test packet, relative to that of the reference test packet. When a test packet is received, a reception time acquisition unit measures its reception time relative to the reception time of the reference test packet. Calculating the difference between the transmission and reception times and evaluating such difference values for all routes, a transport time evaluation unit ranks the routes in terms of their packet transport times. A packet transmitter selects an appropriate route from the ranked list of possible routes, and sends out packets to the selected route.